



M41 Protection Assessment Test System (PATs)

Description: The M41 PATs is a military version of a commercial device - TSI's "Model 8020M Portacount respirator Fit Tester" with the addition of an accessory kit, supplies, and a carrying case to comprise a system. The PATs is designed to check the readiness of protective masks. It is approximately 200 cubic inches in size, weighs 4 pounds, and is based on a miniature Condensation Nucleus Counter that continuously samples and counts individual particles that occur naturally in the surrounding air. The PATs measures the concentration of these particles inside and outside the mask and calculates a Protection Factor.

Capability: The PATs is designed to verify that a protective mask, while worn by a soldier, is capable of providing a minimum Army requirement PF of 1667. The PATs verifies that: (1) the fit of the mask to the soldiers' face is acceptable, and (2) there are no critical leaks in the mask system. In addition to these features, the PATs can also be used to help screen for unserviceable masks, assist in determining if Preventive Maintenance Checks and Services (PMCS) have been conducted properly on critical components, and assist in training personnel on the proper wearing of the mask.



User: U.S. Army, U.S. Army Reserve, U.S. Army National Guard, U.S. Marine Corps, U.S. Air Force (active, guard, and reserve) and Surety Sites.

Supply & Maintenance: A Joint Service Operator's Manual was made available in Sep 99. Higher-level maintenance is required that the operator cannot perform. This maintenance requires a specialized calibration bed and a trained technician. Organic support is provided by TMDE at Redstone Arsenal after 18 months of unit service.

Status:

- In Production since FY94
- Full Material Release (Jan 99)
- Organic Maintenance (TMDE) (Oct 97)
- Joint Service Manual (Sep 99)

Fielded:

- 6,617 units Army, AR, NG, and Surety Sites (ongoing)
- 469 units USMC (FY94)
- 656 units USAF (FY99)

Basis of Issue: One per company, fully deployable with using unit.



For additional information, please contact Director, Edgewood Chemical Biological Center, ATTN: AMSSB-REN-EM, Aberdeen Proving Ground, MD 21010-5424. The System Manager can also be reached by telephone at (410) 436-6728 or DSN 584-6728.